Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 46-70 are pending in the application, with claims 46 and 64 being the independent claims. Claims 46 and 64 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objections to the Claims

Claim 56 was objected to because "claim 56 recites 'contact addressable memory' which is interpreted by the Examiner as 'content addressable memory' since CAM stands for 'content addressable memory'." (Office Action, p. 3). Applicants traverse this rejection.

Applicants specification uses the term "contact addressable memory (CAM)" (Specification, p. 8, lines 14-15). The term contact addressable memory (CAM) is also used in industry. (*See*, e.g., The IEEE Computer Society Style Guide which lists the acronym CAM as "contact addressable memory," http://www.computer.org/portal/site/ieeecs/menuitem.c5efb9b8ade9096b8a9ca0108bcd45f3/index.jsp?&pName=ieeecs_level1&path=ieeecs/publications/author/style&file=abc.xml&xsl=generic.xsl&). Reconsideration and withdrawal of the objection are respectfully requested.

Rejections under 35 U.S.C. §112

Claims 58, 59, 61, and 62 were rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. Specifically, the Office Action states that "Applicant's disclosure does not explicitly describe the device, as claimed in claim 46, being a router, firewall, gateway, or server. The specification on the other hand merely states that the cryptography accelerator chips (processing engines) may be included in routers or gateways (see Applicant's background, page 1, lines 19-25). Also, there is no disclosure of the device being a firewall nor a server." (Office Action, p. 4). Applicants respectfully traverse this rejection.

To satisfy the written description requirement, the disclosure of the application must reasonably convey to those skilled in the art that the applicant was in possession of the claimed invention as of the date of the invention. *Regents of the University of California v. Eli Lilly & Co.,* 119 F.3d 1559, 1566-67 (Fed. Cir. 1997). As acknowledged by the Examiner, Applicants' specification describes that cryptography accelerator chips can be included in routers or gateways. (Specification, p. 1, line 25). Applicants' specification also describes that "[o]ne beneficial system-level solution for high-end Web switches and routers is to integrate a chip in accordance with the present invention functionality with a gigabit Ethernet MAC and PHY. The next generation of firewalls being designed today require sustained security bandwidths in the gigabit range. Chips in accordance with the present invention can deliver sustained full duplex multi-gigabit IPSec processing performance." (Specification, p. 7, lines 8-13).

Based on the specification, a person skilled in the art would recognize that the device, as claimed in claim 46, could be a router, firewall, gateway, or server. Reconsideration and withdrawal of the rejection is therefore respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 46-70 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Leung, U.S. Patent No. 6,760,444 (Leung) in view of Harrison, et al, European Patent Publication EP-0876026 A2 (Harrison). Applicants respectfully traverse this rejection.

The combination of Leung and Harrison does not teach or suggest each and every element of amended independent claims 46 and 64. As discussed in Applicants' Amendment and Reply Under 37 C.F.R. §1.116 filed on August 25, 2006 and acknowledged in the Office Action, Leung does not describe or suggest that the server includes a plurality of security processing engines for performing authentication. (Reply under §1.116, pp. 6-7). However, the Examiner states in the Office Action that it "would have been obvious modification to one of ordinary skill in the art to use plurality of processing engines to perform the process in parallel as to improve latency and performance." (Office Action, p. 5). Applicants traverse the Examiner's noticed fact. The "notice of facts beyond the record which may be taken by the examiner must be 'capable of such instant and unquestionable demonstration as to defy dispute'." *MPEP §2144.03A, citing In re Ahlert,* 424 F.2d 1088, 1091 (CCPA 1970). Cryptographically processing multiple packets in parallel within a device is not well-know in the art or common knowledge. Applicants respectfully request the examiner provide documentary evidence in the next Office Action if the rejection is maintained.

Harrison does not overcome the deficiencies of Leung relative to independent claims 46 and 64. Harrison describes a system and method for concurrently processing multiple cryptographic programs. (Harrison, col. 3, lines 3-5). In Harrison, cryptographic controller (CC) 11 "performs background staging. Next tasks and data

units are staged during execution of present tasks. The background staging allows for the high throughput of system 10. For example, data unit transfer to PCP 17, memory cleanup and program loading for the next data unit are performed during processing of a previous data unit." (Harrison, p. 5, lines 7-13). Harrison further describes that "CC 11 manages swapping of context from an active task in PCP 17 to an inactive task in the external context memory." (Harrison, col. 6, lines 35-37). As further discussed in Harrison, "[i]n a multiprocessing system that swaps context, many simultaneous channels operate in time division owing to multiple channel operation." (Harrison, col. 15, lines 38-41). Thus, Harrison processes a single packet at a time.

Accordingly, Harrison does not teach or suggest:

> A device, comprising:
> a classification module in the device that determines security association information associated with each data packet in a plurality of data packets,
> a plurality of security processing engines in the device, coupled to the classification module, configurable to perform authentication, encryption, or decryption functions,
> wherein the classification module is configured to provide at least a portion of the security association information associated with the data packets to the plurality of security processing engines, wherein at least two of the plurality of security processing engines receive security association information for different packets, and
> wherein the plurality of security processing engines are configured to process a plurality of the data packets in parallel.

as recited in amended independent claim 46. Harrison also does not teach or suggest:

> A method for classifying data packets during security processing in a device, comprising:
> receiving, in the device, at least a portion of a header for each data packet in a plurality of data packets;
> determining security association information associated with each data packet in the plurality of data packets;
> for each data packet in the plurality of data packets, providing at least a portion of the security association information associated with the data packet to a corresponding security processing engine in a plurality of security processing engines in the device that are

> configured to perform authentication, encryption, or decryption functions , wherein at least two of the plurality of security processing engines receive security association information for different packets; and
>
> processing a plurality of data packets in parallel.

as recited in amended independent claim 64. For at least these reasons, independent claims 46 and 64 are patentable over the combination of Leung and Harrison. For at least these reasons, and further in view of their own features, claims 47-63 which depend from claim 46, and claims 65-70 which depend from claim 64, respectively, are patentable over the combination of Leung and Harrison. Reconsideration and withdrawal of the ground of rejection are therefore respectfully requested.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Lori A. Gordon
Attorney for Applicants
Registration No. 50,633

Date: May 7, 2007

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

608894_1.DOC